

IN THE UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF INDIANA
INDIANAPOLIS DIVISION

POLYMER TECHNOLOGY SYSTEMS,
INC.

Plaintiff,

v.

CIVIL ACTION NO. 1:10-cv-0061 LJM-TAB

ROCHE DIAGNOSTICS CORPORATION,
ROCHE DIAGNOSTICS GMBH, ROCHE
DIAGNOSTICS OPERATIONS, INC.,
ROCHE OPERATIONS LTD

Defendants.

**DECLARATION OF JIM MILLER IN SUPPORT OF PLAINTIFF'S
MEMORANDUM IN RESPONSE TO DEFENDANTS' MOTION TO COMPEL
ARBITRATION AND DISMISS THE ACTION AND FURTHER IN SUPPORT
OF PLAINTIFF'S MOTION FOR AN ORDER ENJOINING DEFENDANTS
FROM ARBITRATING INFRINGEMENT**

I, Jim Miller, based upon my own personal knowledge, declare as follows:

1. I am an Electronics Engineering Tech at Polymer Technology Systems (PTS) in Indianapolis Indiana where I have responsibility for the design, maintenance and performance of the CardioChek PA and CardioChek meters. In particular, in 2008 I was a member of the team which designed the electronics and software for the model 2.5x CardioChek PA and CardioChek meters that have been manufactured and sold by PTS since February, 2009. I am also familiar with previous versions of the meter, particularly the 2.3x which went on the market in August 2005. I am familiar with the differences in the software for the 2.3x and 2.5x meters as I have generated documentation evaluation for both meters. I believe I know as much about these two meters as anybody at PTS.

2. I am over the age of 18 and have personal knowledge of the facts stated herein

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and can competently testify as to those facts if requested to do so.

3. In the PTS system, a color is developed in a reaction layer of a test strip inserted in the meter. The color is detected by the sensing system and tells how much cholesterol is in the strip.

4. In the PTS system, the sensing system includes an LED, a photodiode, a sense amp and an analog to digital (A to D) converter. The LED shines light on the strip, which light is reflected from the strip and sensed by the photodiode. The photodiode is connected to the operational amplifier which may be referred to as a sense amp, and the sense amp is connected to the analog to digital (A to D) converter. The sense amp amplifies the signal and the signal is converted to a digital signal by the A to D converter. The digital signal is representative of the reflectance, which is inversely proportional to the color density. The digital signal is stored in the internal memory of the meter.

5. The amount of color does not depend in any way on the sensor. The color is the same whether it is measured or not. The color does not depend on the LED, the photodiode, the sense amp or the A to D converter in any way.

6. The PTS system essentially works the same as the human eye and brain works in determining the color of a book. The human eye can tell if it is a red book or a green book by sensing the reflected light. The color of the book does not change just because the human looks at it.

7. Likewise, the color of the strip in the PTS meter does not change just because the LED shines on it and the photodiode detects the reflectance.

8. As I understand it, to infringe the Roche patent number 5,366,609 (the '609 patent), during the test which measures the analyte, the meter has to access the pluggable memory for parameters that control the sensing elements. In the PTS meters, no data is

downloaded during the test.

9. PTS regularly updates its meters as required by advancing technology, and has made two major redesigns in the last five years. One was in 2005 and resulted in the 2.3x meter, and the other was in 2008 and resulted in the 2.5x meter. These changes and redesigns are based on suggestions by engineers and marketing personnel.

10. Since at least August 2005, no PTS meter has accessed the pluggable memory for the LED, photodiode, sense amp or A to D converter parameters during the test.

11. The PTS 2.3x and 2.5x meters have two parameters related to the LED. There are four different LED positions; one position employs both a red and green LED; the other positions employ only a red LED. One position is not used, but is reserved for future development. The other positions depend on which strip is inserted: different strips have different positions for the sample. One of the two parameters designates which LED(s) are to be pulsed. Another parameter gives the frequency of the LED pulses. Both parameters are downloaded before the test is run and stay the same throughout the test. Neither of the meters has any parameter related to the photo diode or sense amp. There is one parameter for the A to D converter that is different for the green LED than for the other LEDs. This parameter is not downloaded but is hardwired into the A to D converter. When the diode to be pulsed is selected, this parameter is automatic.

12. Further, the photodiode has always been passive. That is, it does not have any parameters that control it.

13. Thus, since at least August 2005, all parameters necessary for the test were downloaded prior to the start of the test and were not changed during the test.

14. In both the 2.3x meter and the 2.5x meter, all the data taken during the test is stored in the internal memory of the meter. This data is in the form of reflectance measurements.

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In the 2.3x meter, after the test was completed, a table was downloaded from the pluggable memory, which table was used to convert the reflectance data to concentration data. The converted data was stored in the internal memory.

15. In the 2.5x redesign, the internal memory is big enough to hold everything in the pluggable memory. Thus, the conversion table is also downloaded before the test is run. That is, everything in the pluggable memory is downloaded before the test.

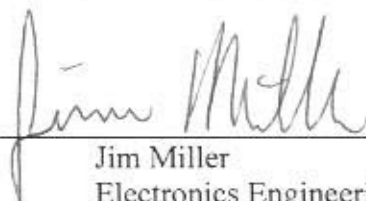
16. The meter does however check for the presence of the pluggable memory chip.

17. That is, in both the 2.3x and the 2.5x design, as a safety and marketability feature, the MEMo™ Chip is polled regularly to determine if it is inserted. If it is not, the meter displays instructions to insert the MEMo Chip. This is to prevent the MEMo chip from getting lost or mixed up with MEMo Chips for other tests. It is also done so the functionality appears the same to customers that were used to the old pre-2.3x meter.

18. I have created a demonstration version of the V2.5x code where only the polling function with the INSTALL MEMO CHIP message is disallowed. With the polling function disallowed, the MEMo Chip can be removed after the test is initiated, and the test proceeds without disruption.

19. In both the 2.3x meter and the 2.5x meter, no data is received from the MEMo Chip pluggable memory during the poll function or during the test.

I DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE UNITED STATES OF AMERICA THAT THE FOREGOING IS TRUE AND CORRECT AND THAT THIS DECLARATION WAS EXECUTED ON April 15, 2010 IN INDIANAPOLIS, INDIANA.


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